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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,025	06/06/2002	Albertus Cornelis Den Brinker	NL 000288	4466
7590 02/18/2005			EXAMINER	
Corporate Patent Counsel Philips Electronics North America Corporation 580 White Plains Road Tarrytown, NY 10591			VO, HUYEN X	
			ART UNIT	PAPER NUMBER
			2655	
DATE MAILED: 02/18/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,025

Applicant(s)

DEN BRINKER ET AL.

Examiner

Huyen Vo

Art Unit

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/6/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, and 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Eatwell (US Patent No. 5742694).

3. Regarding claims 1, 3, and 5, Eatwell discloses a method of encoding an audio signal, an audio encoder and system, comprising the steps of:

determining basic waveforms in the audio signal (*Predictable Component 3 in figure 4*);

obtaining a noise component from the audio signal by subtracting the basic waveforms from the audio signal (*Prediction Error 4 in figure 4*);

modeling a spectrum of the noise component by determining auto-regressive and moving-average parameters (*element 42 in figures 3 or 5, or referring to col. 8, ln. 22-47, where filter coefficients are determined*); and

including the auto-regressive and the moving-average parameters

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and waveform parameters representing the basic waveforms in an encoded audio signal (*Output signal 8 in figures 3 or 5*).

4. Regarding claim 6, Eatwell discloses an encoded audio signal comprising:
waveform parameters representing basic waveforms (*Predictable Component 3 in figure 4*); and

auto-regressive parameters and moving-average parameters representing a spectrum of a remaining noise component (*element 42 in figures 3 or 5 or referring to col. 8, ln. 22-47*).

5. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Miseki et al. (US Patent No. 6167375).

6. Regarding claims 1, 3, and 5, Miseki et al. disclose a method of encoding an audio signal, an audio encoder and system, comprising the steps of:

determining basic waveforms in the audio signal (*Predictor 547 in figure 18*);
obtaining a noise component from the audio signal by subtracting the basic waveforms from the audio signal (*Output of the summer 543 in figure 18*);

modeling a spectrum of the noise component by determining auto-regressive and moving-average parameters (*col. 8, ln. 22-47, where filter coefficients are determined*); and

including the auto-regressive and the moving-average parameters

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and waveform parameters representing the basic waveforms in an encoded audio signal (*Output signal 513 in figure 16*).

7. Regarding claim 6, Miseki et al. discloses an encoded audio signal comprising:
waveform parameters representing basic waveforms (*Predictor 547 in figure 18*);
and auto-regressive parameters and moving-average parameters representing a
spectrum of a remaining noise component (*col. 8, ln. 22-47, filter coefficients are
determined*).

8. Regarding claims 2, 4, and 5, Miseki et al. disclose a method of decoding an
encoded audio signal, an audio player and system, comprising the steps of:
receiving an encoded audio signal comprising waveform parameters
representing basic waveforms and auto-regressive and moving-average parameters
representing a spectrum of a remaining noise component (*col. 23, ln. 1-35 together with
figure 20, ARMA parameters are transmitted to the decoder side for use*);

filtering a white noise signal to obtain a reconstructed noise component, which
filtering is determined by the auto-regressive parameters and the moving-average
parameters (*Noise Decoder 290 in figure 23*);

synthesizing basic waveforms based on the waveform parameters (*Speech
Decoder 280 in figure 23*); and

adding the reconstructed noise component to the synthesized basic waveforms
to obtain a decoded audio signal (*Mixer 295 in figure 23*).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eatwell (US Patent No. 5742694).

11. Regarding claim 7, Eatwell fails to disclose a storage medium on which an encoded audio signal as claimed in claim 6 is stored. However, it would have been obvious to one skilled in the art at the time of invention to implement the method in claim 6 in computer codes to facilitate maintenance and updating.

12. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miseki et al. (US Patent No. 6167375).

13. Regarding claim 7, Miseki et al. fail to disclose a storage medium on which an encoded audio signal as claimed in claim 6 is stored. However, it would have been obvious to one skilled in the art at the time of invention to implement the method in claim 6 in computer codes to facilitate maintenance and updating.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. *Akamine* et al. (IEEE Publication) teach an ARMA model based speech coding scheme that is considered pertinent to the claimed invention.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen Vo whose telephone number is 703-305-8665. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Huyen X. Vo

November 22, 2004


SUSAN MCFADDEN
PRIMARY EXAMINER